	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
1	BRS	L1	1482	neuropeptide adj y	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:00			0
2	BRS	L2	606	(neuropeptide adj y) same (antagonist or agonist)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:22			0
3	BRS	L3	1	tripeptide same 2	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:21			0
4	BRS	L4	333	neuropeptide adj y adj receptor	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:02			0
5	BRS	L5	159	4 same (antagonist or agonist)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:02			0
6	BRS	L6	35	peptide same 5	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:03			0
7	BRS	L7	195	peptide same 2	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:21			0

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
8	BRS	L8	3	(neuropeptide adj y) same tripeptide	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:22			0
9	BRS	L9	6915	tripeptide	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:28			0
10	BRS	L10	120873	(pharmaceutical or therapeutic) adj composition	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:23			0
11	BRS	L11	113	9 same 10	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:24			0
12	BRS	L12	0	11 same 1	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:24			0
13	BRS	L13	209	trp adj arg adj tyr	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:25			0
14	BRS	L14	751	gln adj arg adj tyr	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:25			0

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
15	BRS	L15	2	trp adj arg adj tic	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:25			0
16	BRS	L16	2	tcc adj arg adj tic	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:25			0
17	BRS	L17	0	(13 or 14 or 15 or 16) same 10	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:26			0
18	BRS	L18	5	(13 or 14 or 15 or 16) same 1	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:26			0
19	BRS	L19	54	cationized adj albumin	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:27			0
20	BRS	L20	7303	polylysine	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:28			0
21	BRS	L21	0	tripeptide same (19 or 20) same conjugate	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:29			0

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
22	BRS	L22	2	balasubramanium adj ambikaipakan.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:32			0
23	BRS	L23	2	chance adj william.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/03 09:32			0

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FILE 'MEDLINE' ENTERED AT 09:38:39 [redacted] 03 JUL 2003

FILE 'CAPLUS' ENTERED AT 09:38:39 ON 03 JUL 2003
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FILE 'SCISEARCH' ENTERED AT 09:38:39 ON 03 JUL 2003
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FILE 'AGRICOLA' ENTERED AT 09:38:39 ON 03 JUL 2003

=> s neuropeptide y
L1        46753 NEUROPEPTIDE Y

=> s l1 (p) (agonist or antigonist)
L2         3800 L1 (P) (AGONIST OR ANTIGONIST)

=> S TRIPEPTIDE (p) l2
L3            6 TRIPEPTIDE (P) L2

=> duplicate remove l3
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L3
L4             2 DUPLICATE REMOVE L3 (4 DUPLICATES REMOVED)

=> d l4 1-2 ibib abs

L4   ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2000:31342  CAPLUS
DOCUMENT NUMBER:          132:88195
TITLE:                    Neuropeptide Y agonist and antagonist peptides for
                          control of appetite, blood pressure, cardiovascular
                          response, libido, and circadian rhythm
INVENTOR(S):              Balasubramanium, Ambikaipakan; Chance, William T.
PATENT ASSIGNEE(S):       University of Cincinnati, USA
SOURCE:                   U.S., 17 pp.
                          CODEN: USXXAM
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
     US 6013633         A    20000111       US 1997-907403   19970807
     US 6235718         B1   20010522       US 1999-449914   19991202
PRIORITY APPLN. INFO.:                    US 1997-907403   A3 19970807
OTHER SOURCE(S):          MARPAT 132:88195
AB   Dipeptides and  ***tripeptides***  , and methods for pharmaceutical
     treatment of mammals using analogs of such dipeptides and
       ***tripeptides***  , are provided.  More specifically, the invention
     relates to  ***tripeptides***  and their analogs, to pharmaceutical
     compns. contg. such dipeptides and  ***tripeptides***  , and to methods
     of treatment of mammals using such dipeptides and  ***tripeptides***  .
     In addn., the invention relates to methods of treatment of mammals using
     such dipeptides and  ***tripeptides***  for control of appetite, blood
     pressure, cardiovascular response, libido, and circadian rhythm.  The
     compds. of the invention are  ***neuropeptide***  ***Y***  receptor
       ***agonists***  and antagonists.
REFERENCE COUNT:          1     THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4   ANSWER 2 OF 2     MEDLINE                                  DUPLICATE 1
ACCESSION NUMBER:    1999089557     MEDLINE
DOCUMENT NUMBER:     99089557   PubMed ID: 9874161
TITLE:               BIBP 3226 inhibition of nicotinic receptor mediated
                     chromaffin cell secretion.
AUTHOR:              Zhang P; Zheng J; Hexum T D
```

CORPORATE SOURCE: Department of Pharmacology, University of Nebraska Medical Center, Omaha [redacted]98-6260, USA.
SOURCE: EUROPEAN JOURNAL OF PHARMACOLOGY, (1998 Dec 4) 362 (2-3) 121-5.
Journal code: 1254354. ISSN: 0014-2999.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199903
ENTRY DATE: Entered STN: 19990326
Last Updated on STN: 19990326
Entered Medline: 19990318

AB (R)-N 2-(diphenacetyl)-N-[(4-hydroxyphenyl)methyl]-argininamide (BIBP 3226) is a selective ***neuropeptide*** ***Y*** Y1 receptor antagonist with structural similarity to the C-terminal ***tripeptide*** of ***neuropeptide*** ***Y*** . Based on this similarity we questioned whether BIBP 3226 could act as an ***agonist*** . Incubation of BIBP 3226 with bovine chromaffin cells in culture results in the inhibition of nicotinic receptor-stimulated catecholamine secretion (IC50 = 2.4 microM). The effect of BIBP 3226 is independent of ***neuropeptide*** ***Y*** action since the presence of ***neuropeptide*** ***Y*** in the culture medium does not alter the effect of BIBP 3226. BIBP 3226 decreased the efficacy of the nicotinic receptor ***agonist*** , 1,1-dimethyl-4-phenylpiperizinium (DMPP), but did not change its potency suggesting non-competitive inhibition. BIBP 3226 has a similar effect on nicotinic receptor-stimulated 45Ca2+ influx. BIBP 3226 does not inhibit [3H]norepinephrine release induced by high K+ and its effect is not pertussis toxin-sensitive. We conclude that not only can BIBP 3226 act as a ***neuropeptide*** ***Y*** receptor antagonist in bovine chromaffin cells but also act as an ***agonist*** and inhibit catecholamine secretion.

```
=> d his

     (FILE 'HOME' ENTERED AT 09:38:08 ON 03 JUL 2003)

     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     09:38:39 ON 03 JUL 2003
L1        46753 S NEUROPEPTIDE Y
L2         3800 S L1 (P) (AGONIST OR ANTIGONIST)
L3            6 S TRIPEPTIDE (P) L2
L4            2 DUPLICATE REMOVE L3 (4 DUPLICATES REMOVED)

=> s l1 (P) tripeptide
L5           18 L1 (P) TRIPEPTIDE

=> duplicate remove l5
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L5
L6            6 DUPLICATE REMOVE L5 (12 DUPLICATES REMOVED)

=> s l6 not l4
L7            4 L6 NOT L4

=> d l7 1-4 ibib abs

L7   ANSWER 1 OF 4     MEDLINE
ACCESSION NUMBER:    2001264387     MEDLINE
DOCUMENT NUMBER:     21255644   PubMed ID: 11356711
TITLE:               Neuropeptide Y has a central inhibitory action on the
                     hypothalamic-pituitary-thyroid axis.
AUTHOR:              Fekete C; Kelly J; Mihaly E; Sarkar S; Rand W M; Legradi G;
                     Emerson C H; Lechan R M
CORPORATE SOURCE:    Tupper Research Institute and Department of Medicine,
                     Division of Endocrinology, Diabetes, Metabolism and
                     Molecular Medicine, New England Medical Center, Boston,
                     Massachusetts 02111, USA.
CONTRACT NUMBER:     DA-10732 (NIDA)
     DK-37021 (NIDDK)
SOURCE:              ENDOCRINOLOGY, (2001 Jun) 142 (6) 2606-13.
                     Journal code: 0375040. ISSN: 0013-7227.
PUB. COUNTRY:        United States
DOCUMENT TYPE:       Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:            English
```

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 200106
ENTRY DATE: Entered STN: 20010625
Last Updated on STN: 20010625
Entered Medline: 20010621

AB Recent evidence suggests that ***neuropeptide*** ***Y*** (NPY), originating in neurons in the hypothalamic arcuate nucleus, is an important mediator of the effects of leptin on the central nervous system. As these NPY neurons innervate hypophysiotropic neurons in the hypothalamic paraventricular nucleus (PVN) that produce the ***tripeptide*** , TRH, we raised the possibility that NPY may be responsible for resetting of the hypothalamic-pituitary-thyroid (HPT) axis during fasting. To test this hypothesis, the effects of intracerebroventricularly administered NPY on circulating thyroid hormone levels and proTRH messenger RNA in the PVN were studied by RIA and in situ hybridization histochemistry, respectively. NPY administration suppressed circulating levels of thyroid hormone (T(3) and T(4)) and resulted in an inappropriately normal or low TSH. These alterations were associated with a significant suppression of proTRH messenger RNA in the PVN, indicating that NPY infusion had resulted in a state of central hypothyroidism. Similar observations were made in NPY-infused animals pair fed to the vehicle-treated controls. These data are reminiscent of the effect of fasting on the thyroid axis and indicate that NPY may play a major role in the inhibition of HPT axis during fasting.

L7 ANSWER 2 OF 4 MEDLINE
ACCESSION NUMBER: 91193701 MEDLINE
DOCUMENT NUMBER: 91193701 PubMed ID: 2013752
TITLE: Multicatalytic, high-Mr endopeptidase from postmortem human brain.
AUTHOR: McDermott J R; Gibson A M; Oakley A E; Biggins J A
CORPORATE SOURCE: Medical Research Council, Neurochemical Pathology Unit, Newcastle General Hospital, England.
SOURCE: JOURNAL OF NEUROCHEMISTRY, (1991 May) 56 (5) 1509-17.
Journal code: 2985190R. ISSN: 0022-3042.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199105
ENTRY DATE: Entered STN: 19910602
Last Updated on STN: 20000303
Entered Medline: 19910516

AB The main high molecular weight (650K) multicatalytic endopeptidase has been purified from postmortem human cerebral cortex. As in other tissues and species, this enzyme is composed of several subunits of 24-31K and has three distinct catalytic activities, as shown by the hydrolysis of the fluorogenic ***tripeptide*** substrates glutaryl-Gly-Gly-Phe-7-amido-4-methylcoumarin, benzyloxycarboxyl-Gly-Gly-Arg-7-amido-4-methylcoumarin, and benzyloxycarboxyl-Leu-Leu-Glu-2-naphthylamide with hydrophobic (Phe), basic (Arg), and acidic (Glu) residues in the P1 position, respectively. These activities are distinguishable by their differential sensitivity to peptidase inhibitors. The enzyme hydrolysed neuropeptides at pH 7.4 at multiple sites with widely differing rates, ranging from 113 nmol/min/mg for substance-P, down to 2 nmol/min/mg for bradykinin. The enzyme also had proteinase activity as shown by the hydrolysis of casein. For the hydrolysis of the Tyr5-Gly6 bond in luteinizing hormone-releasing hormone, the Km was 0.95 mM and the specificity constant (kcat/Km) was 4.7 X 10(3) M-1 s-1. The bond specificity of the enzyme at neutral pH was determined by identifying the degradation products of 15 naturally occurring peptide sequences. The bonds most susceptible to hydrolysis had a hydrophobic residue at P1 and either a small (e.g., -Gly or -NH2) or hydrophobic residue at P'1. Hydrolysis of -Glu-X bonds (most notably in ***neuropeptide*** ***Y***) and the Arg6-Arg7 bond in dynorphin peptides was also seen. Thus the three activities identified with fluorogenic substrates appear to be expressed against oligopeptides.

L7 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:597891 CAPLUS
DOCUMENT NUMBER: 130:14221
TITLE: A new neutral protected tripeptide which inhibits the binding of NPY to rat hippocampus membranes
AUTHOR(S): Pinori, Massimo; Di Gregorio, Giuseppina; Starace, Olivia; Marchetti, Letizia; Mizrahi, Jacques; Mascagni, Paolo
CORPORATE SOURCE: Italfarmaco SpA, Research Centre, Milan, I-20092, Italy

SOURCE: Peptides 1[illegible], Proceedings of the European Peptide Symposium, [illegible]th, Edinburgh, Sept. 8-13, 19[illegible] (1998), Meeting Date 1996, 725-726. Editor(s): Ramage, Robert; Epton, Roger. Mayflower Scientific: Kingswinford, UK.
CODEN: 66RCA5
DOCUMENT TYPE: Conference
LANGUAGE: English
AB A symposium report on the prepn. and receptor binding of Nin-formyl-D-tryptophan tri- and tetrapeptide derivs. Thus, Me2CHCH2O2C-D-Trp(CHO)-Gly-Gly-NH2 showed binding to cortex (Y1) and hippocampus (Y2) receptors with IC50 = 540 and 4 nM, resp.
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:497541 CAPLUS
DOCUMENT NUMBER: 129:270986
TITLE: WRYamide, a NPY-based tripeptide that antagonizes feeding in rats
AUTHOR(S): Chance, William T.; Tao, Zhiyong; Sheriff, Sulaiman; Balasubramaniam, Ambikaipakan
CORPORATE SOURCE: Department of Surgery, University of Cincinnati Medical Center, Cincinnati, OH, 45267, USA
SOURCE: Brain Research (1998), 803(1,2), 39-43
CODEN: BRREAP; ISSN: 0006-8993
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Modifications of (D-Trp32) neuropeptide Y (NPY) led to the development of potential peptide-based lower mol. wt. (500-800 Da) NPY feeding antagonists. One compd., WRYamide (N-Ac-Trp-Arg-Tyr-NH2), blocked NPY-induced feeding for 1 to 4 h when injected intrahypothalamically (i.h.t.) at 1 to 40 .mu.g. Schedule-induced feeding was also antagonized for up to 24 h by 20 .mu.g of WRYamide, i.h.t. Injection of 2.5 mg/kg (1 mg/rat) of WRYamide, i.v., also reduced significantly schedule-induced feeding for 4 h. A conditioned taste aversion could not be classically conditioned to saccharin using WRYamide as the unconditioned stimulus. These results may lead to the development of systemically active anti-obesity drugs.
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 09:38:08 ON 03 JUL 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 09:38:39 ON 03 JUL 2003
L1 46753 S NEUROPEPTIDE Y
L2 3800 S L1 (P) (AGONIST OR ANTIGONIST)
L3 6 S TRIPEPTIDE (P) L2
L4 2 DUPLICATE REMOVE L3 (4 DUPLICATES REMOVED)
L5 18 S L1 (P) TRIPEPTIDE
L6 6 DUPLICATE REMOVE L5 (12 DUPLICATES REMOVED)
L7 4 S L6 NOT L4

=> s trp-arg-tyr
L8 33 TRP-ARG-TYR

=> s gln-arg-tyr or trp-arg-tic or tcc-arg-tic
L9 117 GLN-ARG-TYR OR TRP-ARG-TIC OR TCC-ARG-TIC

=> s (l8 otr l9) (p) l1
MISSING OPERATOR L8 OTR
The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> s (l8 or l9) (p) l1
L10 73 (L8 OR L9) (P) L1

=> duplicate remove l10
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L10
L11 26 DUPLICATE REMOVE L10 (47 DUPLICATES REMOVED)

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=> s l11 not (l4 or l7)
L12          26 L11 NOT (L4 OR L7)

=> d l12 1-26 ibib abs

L12  ANSWER 1 OF 26     MEDLINE
ACCESSION NUMBER:   2001409723     MEDLINE
DOCUMENT NUMBER:    21184972   PubMed ID: 11287086
TITLE:              Characterization and distribution of neuropeptide Y in the
                    brain of a caecilian amphibian.
AUTHOR:             Ebersole T J; Conlon J M; Goetz F W; Boyd S K
CORPORATE SOURCE:   Department of Biological Sciences, University of Notre
                    Dame, Notre Dame, IN 46556, USA.
SOURCE:             PEPTIDES, (2001 Mar) 22 (3) 325-34.
                    Journal code: 8008690. ISSN: 0196-9781.
PUB. COUNTRY:       United States
DOCUMENT TYPE:      Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:           English
FILE SEGMENT:       Priority Journals
ENTRY MONTH:        200107
ENTRY DATE:         Entered STN: 20010723
                    Last Updated on STN: 20010723
                    Entered Medline: 20010719
AB     ***Neuropeptide***     ***Y***   (NPY) from the brain of an amphibian
     from the order Gymnophiona (the caecilian, Typhlonectes natans) was
     characterized.  We cloned a 790 base pair cDNA encoding the caecilian NPY
     precursor.  The open reading frame consisted of 291 bases, indicating an
     NPY precursor of 97 amino acids.  Both deduced and isolated NPY primary
     structures were Tyr-Pro-Ser-Lys-Pro-Asp-Asn-Pro-Gly-Glu(10)-Asp-Ala-Pro-
     Ala-Glu-Asp-Met-Ala-Lys-Tyr(20)-Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-
     Leu(30)-Ile-Thr-Arg-  ***Gln***  -  ***Arg***  -  ***Tyr***  . NH2.  In
     caecilian brain, we observed NPY immunoreactive cells within the medial
     pallium, basal forebrain, preoptic area, midbrain tegmentum and trigeminal
     nucleus.  The prevalence of preoptic and hypothalamic terminal field
     staining supports the hypothesis that NPY controls pituitary function in
     this caecilian.

L12  ANSWER 2 OF 26     MEDLINE
ACCESSION NUMBER:   1998398379     MEDLINE
DOCUMENT NUMBER:    98398379   PubMed ID: 9729264
TITLE:              WRYamide, a NPY-based tripeptide that antagonizes feeding
                    in rats.
AUTHOR:             Chance W T; Tao Z; Sheriff S; Balasubramaniam A
CORPORATE SOURCE:   Department of Surgery, University of Cincinnati Medical
                    Center, 231 Bethesda Avenue, Cincinnati, OH 45267, USA.
CONTRACT NUMBER:    GM 47122 (NIGMS)
SOURCE:             BRAIN RESEARCH, (1998 Aug 24) 803 (1-2) 39-43.
                    Journal code: 0045503. ISSN: 0006-8993.
PUB. COUNTRY:       Netherlands
DOCUMENT TYPE:      Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:           English
FILE SEGMENT:       Priority Journals
ENTRY MONTH:        199905
ENTRY DATE:         Entered STN: 19990607
                    Last Updated on STN: 19990607
                    Entered Medline: 19990526
AB   Modifications of (D-Trp32)   ***neuropeptide***     ***Y***   (NPY) led to
     the development of potential peptide-based lower molecular weight (500-800
     Da) NPY feeding antagonists.  One compound, WRYamide (N-Ac-  ***Trp***  -
       ***Arg***  -  ***Tyr***  -NH2), blocked NPY-induced feeding for 1 to 4 h
     when injected intrahypothalamically (i.h.t.) at 1 to 40 microgram.
     Schedule-induced feeding was also antagonized for up to 24 h by 20
     microgram of WRYamide, i.h.t.  Injection of 2.5 mg/kg (1 mg/rat) of
     WRYamide, i.v., also reduced significantly schedule-induced feeding for 4
     h.  A conditioned taste aversion could not be classically conditioned to
     saccharin using WRYamide as the unconditioned stimulus.  These results may
     lead to the development of systemically active anti-obesity drugs.
     Copyright 1998 Elsevier Science B.V.

L12  ANSWER 3 OF 26     MEDLINE
ACCESSION NUMBER:   96018834     MEDLINE
DOCUMENT NUMBER:    96018834   PubMed ID: 7565622
TITLE:              Structure-activity relationship of novel pentapeptide
                    neuropeptide Y receptor antagonists is consistent with a
                    noncontinuous epitope for ligand-receptor binding.
AUTHOR:             Daniels A J; Matthews J E; Viveros O H; Leban J J; Cory M;
```

Heyer D
CORPORATE SOURCE: Division of Pharmacology, Burroughs Wellcome Co. Research Triangle Park, North Carolina 27709, USA.
SOURCE: MOLECULAR PHARMACOLOGY, (1995 Sep) 48 (3) 425-32.
Journal code: 0035623. ISSN: 0026-895X.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199510
ENTRY DATE: Entered STN: 19951227
Last Updated on STN: 19970203
Entered Medline: 19951030

AB We report the first systematic study on short peptide structure affinity and activity for the ***neuropeptide*** ***Y*** (NPY) receptor. A series of linear pentapeptides has been synthesized that display affinities in the low micromolar range toward rat brain NPY receptors. Furthermore, some of these compounds competitively antagonize the Y1-type NPY receptor-mediated increase in cytosolic Ca2+ in human erythroleukemic (HEL) cells. The inactive NPY carboxyl-terminal pentapeptide (Thr-Arg-***Gln*** - ***Arg*** - ***Tyr*** -NH2; IC50 > 100 microM) was modified by replacing threonine with an aromatic amino acid and glutamine with leucine. This resulted in a series of pentapeptides with dramatically improved affinity (IC50 = 0.5-4 microM) for the rat brain receptor. The structure-affinity data suggest that these peptides may represent a noncontinuous epitope containing the amino-terminal tyrosine and the carboxyl-terminal residues Arg-35 and Tyr-36 of NPY.

L12 ANSWER 4 OF 26 MEDLINE
ACCESSION NUMBER: 93157164 MEDLINE
DOCUMENT NUMBER: 93157164 PubMed ID: 1494498
TITLE: Rainbow trout (Oncorhynchus mykiss) neuropeptide Y.
AUTHOR: Barton C L; Shaw C; Halton D W; Thim L
CORPORATE SOURCE: School of Biology, Queen's University of Belfast, Northern Ireland.
SOURCE: PEPTIDES, (1992 Nov-Dec) 13 (6) 1159-63.
Journal code: 8008690. ISSN: 0196-9781.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199303
ENTRY DATE: Entered STN: 19930326
Last Updated on STN: 19930326
Entered Medline: 19930309

AB ***Neuropeptide*** ***Y*** (NPY) has been isolated from brain extracts of the rainbow trout (Oncorhynchus mykiss) and subjected to structural analyses. Plasma desorption mass spectroscopy estimated the molecular mass of the purified peptide as 4303.9 Da. Automated Edman degradation unequivocally established the sequence of a 36 amino acid residue peptide as: Tyr-Pro-Pro-Lys-Pro-Glu-Asn-Pro-Gly-Glu-Asp-Ala-Pro-Pro-Glu-Glu-Leu-Ala- Lys- Tyr-Tyr-Thr-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** . The molecular mass calculated from this sequence (4304 Da) is consistent with that obtained by mass spectroscopy. The presence of a C-terminal amide was established by radioimmunoassay. Rainbow trout NPY is identical in primary structure to coho salmon (Oncorhynchus kisutch) pancreatic polypeptide (PP). These data may indicate that, in this group of salmonid fishes, a single member of the NPY/PP peptide family is expressed in both neurons and peripheral endocrine cells.

L12 ANSWER 5 OF 26 MEDLINE
ACCESSION NUMBER: 93092973 MEDLINE
DOCUMENT NUMBER: 93092973 PubMed ID: 1459125
TITLE: Characterization of peptides related to neuropeptide tyrosine and peptide tyrosine-tyrosine from the brain and gastrointestinal tract of teleost fish.
AUTHOR: Jensen J; Conlon J M
CORPORATE SOURCE: Department of Biomedical Sciences, Creighton University, School of Medicine, Omaha, Nebraska 68178.
SOURCE: EUROPEAN JOURNAL OF BIOCHEMISTRY, (1992 Dec 1) 210 (2) 405-10.
Journal code: 0107600. ISSN: 0014-2956.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals

OTHER SOURCE: GENBANK
ENTRY MONTH: 199301
ENTRY DATE: Entered STN: 19930129
Last Updated on STN: 19980206
Entered Medline: 19930111

AB ***Neuropeptide*** ***Y*** was isolated from the brain of the Atlantic cod, Gadus morhua and its primary structure established as Tyr-Pro-Ile*-Lys-Pro-Glu*-Asn-Pro-Gly-Glu10-Asp-Ala-Pro-Ala-Asp*-Glu*-Leu*-Ala- Lys*-Tyr20-Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu30-Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** - CONH2. Residues denoted by an asterisk are different from the corresponding sequence of human ***neuropeptide*** ***Y*** . A structurally similar peptide was isolated from the brain of the trout, Oncorhynchus mykiss. Trout ***neuropeptide*** ***Y*** contains four substitutions (Ile3-->Val, Ala14-->Thr, Asp15-->Glu and Ser22-->Thr) compared with cod ***neuropeptide*** ***Y*** . A second peptide of the ***neuropeptide*** ***Y*** family was identified in the trout brain and this component was structurally similar to peptide tyrosine-tyrosine previously isolated from frog intestine (six amino acid substitutions) and identical to a peptide isolated from the pancreas of the closely related species, Oncorhynchus kisutch (Coho salmon). Peptide tyrosine-tyrosine, with the same primary structure as the brain peptide, was also isolated from an extract of the trout stomach. The data indicate that a peptide analogous to mammalian ***neuropeptide*** ***Y*** is present in the brain of teleost fish and a peptide analogous to mammalian peptide tyrosine-tyrosine is present in brain, gastrointestinal tissue and pancreas. We speculate, therefore, that the putative gene duplication that led to pancreatic polypeptide in the higher vertebrates took place after the time of divergence of fish and tetrapods.

L12 ANSWER 6 OF 26 MEDLINE
ACCESSION NUMBER: 92396601 MEDLINE
DOCUMENT NUMBER: 92396601 PubMed ID: 1523163
TITLE: Structural characterization of neuropeptide Y from the brain of the dogfish, Scyliorhinus canicula.
AUTHOR: Conlon J M; Bjenning C; Hazon N
CORPORATE SOURCE: Department of Biomedical Sciences, Creighton University School of Medicine, Omaha, NE 68178.
SOURCE: PEPTIDES, (1992 May-Jun) 13 (3) 493-7.
Journal code: 8008690. ISSN: 0196-9781.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199210
ENTRY DATE: Entered STN: 19921023
Last Updated on STN: 19921023
Entered Medline: 19921014

AB A peptide of the pancreatic polypeptide (PP) family was isolated in pure form from the brain of an elasmobranch fish, Scyliorhinus canicula (European common dogfish). The primary structure of the peptide was established as: Tyr-Pro-Ser-Lys-Pro-Asp-Asn-Pro-Gly-Glu10-Gly-Ala-Pro-Ala-Glu-Asp- Leu-Ala-Lys- Tyr20-Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu30-Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** -NH2. This sequence contains only two amino acid substitutions compared with pig ***neuropeptide*** ***Y*** (NPY) (Gly for Asp11 and Lys for Arg19), and two substitutions (Gly for Asp11 and Leu for Met17) compared with frog NPY. The amino acid sequence of NPY from dogfish brain is appreciably different from the ***neuropeptide*** ***Y*** -related peptide previously isolated from dogfish pancreas (five amino acid substitutions). The data indicate that evolutionary pressure to conserve the complete primary structure of ***neuropeptide*** ***Y*** has been very strong. It is suggested that the NPY-related peptide present in the pancreas of elasmobranch and teleost fish represents the piscine equivalent of mammalian peptide tyrosine tyrosine (PYY).

L12 ANSWER 7 OF 26 MEDLINE
ACCESSION NUMBER: 91301137 MEDLINE
DOCUMENT NUMBER: 91301137 PubMed ID: 2070789
TITLE: Primary structure and conformational analysis of peptide methionine-tyrosine, a peptide related to neuropeptide Y and peptide YY isolated from lamprey intestine.
AUTHOR: Conlon J M; Bjornholm B; Jorgensen F S; Youson J H; Schwartz T W
CORPORATE SOURCE: Regulatory Peptide Center, Creighton University School of Medicine, Omaha, NE 68178.
SOURCE: EUROPEAN JOURNAL OF BIOCHEMISTRY, (1991 Jul 15) 199 (2)

293-8.
Journal code: [redacted]600. ISSN: 0014-2956.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199108
ENTRY DATE: Entered STN: 19910908
Last Updated on STN: 19980206
Entered Medline: 19910820

AB A peptide belonging to the pancreatic-polypeptide-fold family of regulatory peptides has been isolated from the intestine of an Agnathan, the sea lamprey (Petromyzon marinus). The primary structure of the peptide (termed peptide methionine-tyrosine) was established as Met-Pro-Pro-Lys-Pro-Asp-Asn- Pro-Ser-Pro10-Asp-Ala-Ser-Pro-Glu-Leu-Ser-Lys-Tyr20-Met-Leu- Ala-Val-Arg-Asn- Tyr-Ile-Asn-Leu30-Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** CONH2. This sequence shows stronger structural similarity with pig ***neuropeptide*** ***Y*** (64%), particularly in the COOH-terminal region, than with pig peptide tyrosine--tyrosine (61%) or with pig pancreatic polypeptide (42%). Molecular modelling and dynamic simulation, based upon sequence similarity with turkey pancreatic polypeptide, indicates that the conformations of the polyproline-helix-like region (residues 1-8) and the alpha-helical region (residues 15-30) in turkey pancreatic polypeptide are conserved in peptide methionine-tyrosine, and that non-bonded interactions between these domains have preserved the overall polypeptide fold in the molecule. The substitution of the otherwise totally conserved Gly9 residue by serine in lamprey peptide methionine-tyrosine, however, results in a preferred structure in which the conformation of the beta-turn between the two helical domains (residues 9-14) is appreciably different.

L12 ANSWER 8 OF 26 MEDLINE
ACCESSION NUMBER: 91296574 MEDLINE
DOCUMENT NUMBER: 91296574 PubMed ID: 2067973
TITLE: Neuropeptide Y-related peptides from the pancreas of a teleostean (eel), holostean (bowfin) and elasmobranch (skate) fish.
AUTHOR: Conlon J M; Bjenning C; Moon T W; Youson J H; Thim L
CORPORATE SOURCE: Department of Biomedical Sciences, Creighton University School of Medicine, Omaha, NE 68178.
SOURCE: PEPTIDES, (1991 Mar-Apr) 12 (2) 221-6.
Journal code: 8008690. ISSN: 0196-9781.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199108
ENTRY DATE: Entered STN: 19910901
Last Updated on STN: 19980206
Entered Medline: 19910814

AB Homologous peptides belonging to the pancreatic polypeptide (PP) family were isolated from the pancreas of a teleostean fish, the American eel (Anguilla rostrata), an holostean fish, the bowfin (Amia calva) and an elasmobranch fish, the skate (Raja rhina), and their primary structures were determined. The peptides show stronger homology to ***neuropeptide*** ***Y*** , particularly in their COOH-terminal regions, than to peptide YY or pancreatic polypeptide and contain an alpha-amidated COOH-terminal tyrosine residue. The skate peptide Tyr-Pro-Pro-Lys-Pro-Glu-Asn-Pro-Gly-Asp10-Asp-Ala-Ala-Pro-Glu-Glu-Leu-Ala-Lys- Tyr20-Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu30-Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** -NH2 represents the first member of the PP family to be isolated from a cartilaginous fish. The primary structure of the pancreatic PP family peptide has been more strongly conserved among the phylogenetically more ancient holostean and elasmobranch fishes than among the teleosts. A comparison of the primary structures of all PP family peptides supports the hypothesis and evolution has acted to conserve features of tertiary structure in the molecules (e.g., the polyproline- and alpha-helices) rather than individual amino acid residues.

L12 ANSWER 9 OF 26 MEDLINE
ACCESSION NUMBER: 91219472 MEDLINE
DOCUMENT NUMBER: 91219472 PubMed ID: 1673794
TITLE: Characterization of melanotropin-release-inhibiting factor (melanostatin) from frog brain: homology with human neuropeptide Y.
AUTHOR: Chartrel N; Conlon J M; Danger J M; Fournier A; Tonon M C;

CORPORATE SOURCE: European Institute for Peptide Research, Laboratory of Molecular Endocrinology, Centre National de la Recherche Scientifique, URA 650, Mont-Saint-Aignan, France.
SOURCE: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1991 May 1) 88 (9) 3862-6. Journal code: 7505876. ISSN: 0027-8424.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199105
ENTRY DATE: Entered STN: 19910623
Last Updated on STN: 19950206
Entered Medline: 19910531

AB A polypeptide was purified from frog brain extracts on the basis of its ability to inhibit alpha-melanotropin release from perifused frog neurointermediate lobes. Based on Edman degradation, amino acid analysis, and peptide mapping, the primary structure of this frog melanotropin-release-inhibiting factor (melanostatin) was determined to be H-Tyr-Pro-Ser-Lys-Pro-Asp-Asn-Pro-Gly-Glu-Asp-Ala-Pro-Ala-Glu-Asp-Met-Ala-Lys-Tyr-Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-Ile-Thr-Arg-***Gln*** - ***Arg*** - ***Tyr*** -NH2 . Frog melanostatin belongs to the pancreatic polypeptide/ ***neuropeptide*** ***Y*** /peptide YY family, and the structure of this peptide differs from that of human ***neuropeptide*** ***Y*** by only one amino acid substitution in position 19. A synthetic replicate of frog melanostatin is coeluted with the native peptide on HPLC and is highly potent in inhibiting alpha-melanotropin secretion in vitro (IC50 = 60 nM).

L12 ANSWER 10 OF 26 MEDLINE
ACCESSION NUMBER: 91209266 MEDLINE
DOCUMENT NUMBER: 91209266 PubMed ID: 2019251
TITLE: Structural characterization and biological activity of a neuropeptide Y-related peptide from the dogfish, Scyliorhinus canicula.
AUTHOR: Conlon J M; Balasubramaniam A; Hazon N
CORPORATE SOURCE: Department of Biomedical Sciences, Creighton University School of Medicine, Omaha, Nebraska 68178.
CONTRACT NUMBER: GM-38601 (NIGMS)
SOURCE: ENDOCRINOLOGY, (1991 May) 128 (5) 2273-9. Journal code: 0375040. ISSN: 0013-7227.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199105
ENTRY DATE: Entered STN: 19910616
Last Updated on STN: 19910616
Entered Medline: 19910524

AB A peptide of the pancreatic polypeptide (PP) family was isolated in pure form from the pancreas of an elasmobranch fish, Scyliorhinus canicula (European common dogfish). The primary structure of the peptide was established as: Tyr-Pro-Pro-Lys-Pro-Glu-Asn-Pro-Gly-Glu10-Asp-Ala-Pro-Pro-Glu-Glu-Leu-Ala-Lys-Tyr20-Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu30-Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** .NH2. This sequence contains 86% amino acid sequence homology with human ***neuropeptide*** ***Y*** , and the COOH-terminal region (residues 20-36) has been fully conserved. Bolus injection of a synthetic replicate of the peptide (0.5-4 nmol) into the celiac artery of conscious dogfish resulted in a significant (P less than 0.01) and dose-dependent increase in arterial blood pressure. A maximum rise in mean pressure (67 +/- 11% over mean basal values; n = 6) was elicited by an injection of 2 nmol peptide. Bolus injections of human ***neuropeptide*** ***Y*** (0.5-4 nmol) also elicited dose-dependent rises in blood pressure, and the effects produced by the dogfish and human peptides were not significantly different at any dose. The data are consistent with a physiological role for ***neuropeptide*** ***Y*** -related peptide in cardiovascular regulation in elasmobranch fish.

L12 ANSWER 11 OF 26 MEDLINE
ACCESSION NUMBER: 85076996 MEDLINE
DOCUMENT NUMBER: 85076996 PubMed ID: 3838090
TITLE: Isolation and characterization of neuropeptide Y from porcine intestine.
AUTHOR: Tatemoto K; Siimesmaa S; Jornvall H; Allen J M; Polak J M; Bloom S R; Mutt V

SOURCE: FEBS LETTERS, (1985 Jan 1) 179 (1) 181-4.
Journal code: [redacted]157. ISSN: 0014-5793.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198502
ENTRY DATE: Entered STN: 19900320
Last Updated on STN: 19900320
Entered Medline: 19850214

AB The isolation and primary structure of intestinal ***neuropeptide*** ***Y*** (NPY) is described. The peptide was purified from porcine intestinal extracts using a chemical assay and radioimmunoassay for NPY. The amino acid sequence of this peptide is: Tyr-Pro-Ser-Lys-Pro-Asp-Asn-Pro-Gly-Glu-Asp-Ala-Pro-Ala-Glu-Asp-Leu-Ala- Arg-Tyr-Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** -NH2. This the structure of intestinal NPY is identical to the NPY of brain origin.

L12 ANSWER 12 OF 26 MEDLINE
ACCESSION NUMBER: 83039395 MEDLINE
DOCUMENT NUMBER: 83039395 PubMed ID: 6957876
TITLE: Neuropeptide Y: complete amino acid sequence of the brain peptide.
AUTHOR: Tatemoto K
SOURCE: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1982 Sep) 79 (18) 5485-9.
Journal code: 7505876. ISSN: 0027-8424.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198212
ENTRY DATE: Entered STN: 19900317
Last Updated on STN: 19900317
Entered Medline: 19821221

AB The amino acid sequence of ***neuropeptide*** ***Y*** , a 36-residue peptide recently isolated from porcine brain, has been determined by using high performance liquid chromatography for separation of its tryptic and chymotryptic fragments and subsequent sequence analysis of the isolated fragments by an improved dansyl Edman subtractive technique. The amino acid sequence of ***neuropeptide*** ***Y*** has been found to be: Tyr-Pro-Ser-Lys-Pro-Asp-Asn-Pro-Gly-Glu-Asp-Ala-Pro-Ala-Glu-Asp-Leu-Ala-Arg-Tyr -Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** -NH2. ***Neuropeptide*** ***Y*** has a high degree of sequence homology with peptide YY (70%), the newly isolated porcine intestinal peptide, and pancreatic polypeptide (50%). It is therefore proposed that ***neuropeptide*** ***Y*** , peptide YY, and pancreatic polypeptide are members of a newly recognized peptide family.

L12 ANSWER 13 OF 26 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:45196 CAPLUS
DOCUMENT NUMBER: 130:95852
TITLE: Preparation of cyclized peptide mimetics for stabilizing .alpha.-helix conformations
INVENTOR(S): Kahn, Michael; Kim, Hwa-ok; Urban, Jan
PATENT ASSIGNEE(S): Molecumetics Ltd., USA
SOURCE: U.S., 17 pp., Cont.-in-part of U.S. Ser. No. 548,997.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5859184	A	19990112	US 1997-846431	19970430
US 5840833	A	19981124	US 1995-548997	19951027

PRIORITY APPLN. INFO.: US 1995-548997 19951027
OTHER SOURCE(S): MARPAT 130:95852
GI

/ Structure 1 in file .gra /

AB There are disclosed .alpha.-helix mimetics and methods relating to the same for imparting or stabilizing .alpha.-helicity to a peptide or protein. In one aspect, the .alpha.-helix mimetics contain 11-14-membered rings I [R1-R5 = independently amino acid side chain moiety; W = (CH2)n, NH(CH2)p; n = 0-3, p = 0-2; X, Y = remainder of the peptide mimetic] covalently attached at the end or within the length of the peptide or protein. The .alpha.-helix mimetics render the resulting peptide or protein more stable with regard to thermal stability, as well as making the peptide or protein more resistant to proteolytic degrdn. In addn., the .alpha.-helix mimetics may be used in std. peptide synthesis protocols. Thus, backbone-cyclized peptide II (R = Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** -OH) was prepd. by std. solid-phase coupling methods using a protected alanine thioamide residue and a protected N-aminoleucine residue to introduce functionality for the cyclization. Cyclized peptide II enhanced .alpha.-helical stability, enhanced enzymic stability, and significant ***neuropeptide*** ***Y*** receptor binding affinity, as compared with ***neuropeptide*** ***Y*** analog Ac-Arg-Ala-Ala-Ala-Asn-Leu-Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** -NH2.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 14 OF 26 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:384262 CAPLUS
DOCUMENT NUMBER: 127:5357
TITLE: Preparation of backbone-cyclized structures for imparting or stabilizing .alpha.-helixes in peptides or proteins
INVENTOR(S): Kahn, Michael
PATENT ASSIGNEE(S): Molecumetics Ltd., USA
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9715589	A1	19970501	WO 1996-US17054	19961024
W: AU, CA, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5840833	A	19981124	US 1995-548997	19951027
AU 9674721	A1	19970515	AU 1996-74721	19961024

PRIORITY APPLN. INFO.: US 1995-548997 19951027
WO 1996-US17054 19961024

OTHER SOURCE(S): MARPAT 127:5357
GI

/ Structure 2 in file .gra /

AB There are disclosed .alpha.-helix mimetics I (R1-R5 = independently amino acid side chain moieties; X, Y = remainder of the peptide or protein mol.) and methods relating to the same for imparting or stabilizing alpha-helicity to a peptide or protein. In one aspect, the .alpha.-helix mimetics contain twelve-membered rings covalently attached at the end or within the length of the peptide or protein. The .alpha.-helix mimetics render the resulting peptide or protein more stable with regard to thermal stability, as well as making the peptide or protein more resistant to proteolytic degrdn. In addn., the .alpha.-helix mimetics may be used in std. peptide synthesis protocols. Thus, ***neuropeptide*** ***Y*** (NPY) mimic I (X = Ac-Arg; R1 = R2= R3 = Me; R4 = CH2CONH2, R5 = CH2CHMe2; Y = Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** -OH) (II) was prepd. by solid-phase methods via Hg2+-promoted ring closure of an alanine thioamide, N-aminoleucine precursor. II showed enhanced .alpha.-helicity by CD, and significantly increased proteolytic stability compared to a linear analog. II also shows significant biol. activity in a [3H]-NPY assay.

L12 ANSWER 15 OF 26 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:345970 CAPLUS

DOCUMENT NUMBER: 127:62212
TITLE: Isolation and characterization of two neuropeptide Ys from the hypothalamus of a yellowfin tuna, Thunnus albacares
AUTHOR(S): Ohishi, Takahide; Iguchi, Kazuaki; Mochizuki, Tohru; Hoshino, Minoru; Futai, Yoko; Yanaihara, Noboru
CORPORATE SOURCE: School of Pharmaceutical Sciences, University of Shizuoka, Shizuoka, 422, Japan
SOURCE: Biomedical Research (1997), 18(2), 129-137
CODEN: BRESD5; ISSN: 0388-6107
PUBLISHER: Biomedical Research Foundation
DOCUMENT TYPE: Journal
LANGUAGE: English
AB High concn. of ***neuropeptide*** ***Y*** -like immunoreactivity (NPY-IR) was detected in the ext. of yellowfin tuna (T. albacares) hypothalamus by RIA using antiserum specific to human NPY (26.1 pmol equiv. to human NPY/g tissue). This NPY-IR component was isolated from the crude exts. of tuna hypothalami. Two components, tuna NPY-I and NPY-II, were purified by gel filtration followed by reverse-phase HPLC. The structural anal. revealed that both components comprised of 36 amino acid residues with the C-terminal amide. The amino acid sequence of tuna NPY-I is H-Tyr-Pro-Pro-Lys-Pro-Glu-Asn-Pro-Gly-Glu-Asp-Ala-Pro-Pro-Glu-Glu-Leu-Ala-Lys-Tyr-Tyr-Thr-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-Ile-Thr-Arg-***Gln*** - ***Arg*** - ***Tyr*** -NH2 and that of tuna NPY-II is H-Tyr-Pro-Val-Lys-Pro-Glu-Asn-Pro-Gly-Glu-Asp-Ala-Pro-Pro-Ala-Glu-Leu-Ala-Lys-Tyr-Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** -NH2. Tuna fish was contained 2 different types of NPY, NPY-I and II, with 7 residue substitutions when compared with human NPY.

L12 ANSWER 16 OF 26 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:554363 CAPLUS
DOCUMENT NUMBER: 119:154363
TITLE: Primary structure of neuropeptide Y from brains of the American alligator (Alligator mississippiensis)
AUTHOR(S): Parker, D. B.; McRory, J. E.; Fischer, W. H.; Park, M.; Sherwood, N. M.
CORPORATE SOURCE: Biol. Dep., Univ. Victoria, Victoria, BC, Can.
SOURCE: Regulatory Peptides (1993), 45(3), 379-86
CODEN: REPPDY; ISSN: 0167-0115
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The purifn. of ***neuropeptide*** ***Y*** (NPY) from brains of the American alligator (Alligator mississippiensis) was achieved using reverse-phase high performance liq. chromatog. (HPLC). The amino acid sequence was detd. using automated Edman degrdn. as Tyr-Pro-Ser-Lys-Pro-Asp-Asn-Pro-Gly-Glu-Asp-Ala-Pro-Ala-Glu-Asp-Met-Ala-Arg-Tyr-Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** . Alligator is the first non-mammalian vertebrate to have an NPY with 100% sequence identity to human NPY. The conservation of alligator NPY suggests that serine in position 7 of chicken NPY evolved after the birds and reptiles diverged from a common Archosaurian ancestor. Furthermore, the sequence identity between alligator and human NPY suggests this sequence is the same as the ancestral amniote NPY.

L12 ANSWER 17 OF 26 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:225861 CAPLUS
DOCUMENT NUMBER: 118:225861
TITLE: Characterization of the binding site of neuropeptide Y to the rabbit kidney receptor using multiple peptide synthesis
AUTHOR(S): Beck-Sickinger, Annette G.; Duerr, Hansjoerg; Hoffmann, Eike; Gaida, Wolfram; Jung, Guenther
CORPORATE SOURCE: Inst. Org. Chem., Univ. Tuebingen, Tuebingen, D-7400, Germany
SOURCE: Biochemical Society Transactions (1992), 20(4), 847-50
CODEN: BCSTB5; ISSN: 0300-5127
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Multiple peptide synthesis methods were used to characterize the binding domain of the ***neuropeptide*** ***Y*** (NPY) receptor of the rabbit kidney. ***Neuropeptide*** ***Y*** 1-4-Ahx-25-36 (I) (Ahz = .epsilon.-aminohexanoic acid) showed receptor affinity comparable to that of NPY. To elucidate the structural requirements for receptor recognition and biol. activity, each amino acid of I was exchanged by its D-enantiomer, glycine, and L-alanine. The results of structure-affinity studies indicated that the C-terminal tetrapeptide Arg- ***Gln*** -

Arg - ***Tyr*** -NH2 was essential for NPY receptor binding. In position 36 an unsubstituted [redacted]de and an arom. side chain are [redacted]sential. 33Arg, 34Gln, and 35Arg cannot be replaced by any amino acid tested with the exception of homoarginine for the arginine residues. Amino acid substitutions in the region 1-4-Ahx-25-31 did not induce marked decreases in affinity.

L12 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:148025 CAPLUS
DOCUMENT NUMBER: 118:148025
TITLE: Defining structural requirements for neuropeptide Y receptors using truncated and conformationally restricted analogs
AUTHOR(S): Kirby, Dean A.; Koerber, Steven C.; Craig, A. Grey; Feinstein, Robert D.; Delmas, Laura; Brown, Marvin R.; Rivier, Jean E.
CORPORATE SOURCE: Clayton Found. Lab. Pept. Biol., Salk Inst., La Jolla, CA, 92037, USA
SOURCE: Journal of Medicinal Chemistry (1993), 36(3), 385-93
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB To further elucidate the min. bioactive conformation of ***neuropeptide*** ***Y*** (NPY), a series of truncated and conformationally constrained analogs were prepd. The synthesis and purifn. of these peptides was achieved using routine lab. strategies and techniques. Parent mols. consisted of the native NPY N-terminal 1-4 and C-terminal 25-36 segments, having the residue 5-24 core replaced by either a single flexible .omega.-aminoalkanoic acid, or a more rigid Pro-Gly or Pro-D-Ala sequence which was expected to constrain a putative turn, and allow the N- and C-terminal to align. Crosslinking between residues 2 and 27 through lactamization using side-chain length and chirality suggested by computer simulations, resulted in cyclopeptide I (Dpr = 2,3-diaminopropanoic acid; R = Arg- ***Gln*** - ***Arg*** - ***Tyr*** -NH2), which exhibits very high affinity for the Y2 receptor, yet very low affinity for the Y1 receptor. The added constraint resulting from bridging in I as well as in others suggested that the combination of the deletion of residues 5-24 and the introduction of an internal ring produced exclusive selectivity for the Y2 receptor with little or no less of affinity. The tolerance of structural recognition was further demonstrated as a second ring was introduced which was expected to constrain the amphiphilic .alpha.-helic, resulting in the full Y2 agonist bicyclic peptide II. Improvement of Y1 binding activity was achieved only by including more residues in the central fold region, while allowing limited flexibility of the termini. Although the length of the bridge seemed to have little effect on binding potency, changes in the location of and chirality at the bridgehead resulted in analogs with different binding affinities. Combination of optimum structural modifications resulted in III (R1 = His-Tyr-Ile-Asn-Leu-Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** -NH2), an analog shortened by 25% but retaining comparable binding properties to that native NPY at Y1 and Y2 receptor types.

L12 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1992:152348 CAPLUS
DOCUMENT NUMBER: 116:152348
TITLE: Probing the functional conformation of neuropeptide Y through the design and study of cyclic analogs
AUTHOR(S): Bouvier, Marlene; Taylor, John W.
CORPORATE SOURCE: Lab. Bioorg. Chem. Biochem., Rockefeller Univ., New York, NY, 10021, USA
SOURCE: Journal of Medicinal Chemistry (1992), 35(6), 1145-55
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB The functional importance of the PP-fold conformation in ***neuropeptide*** ***Y*** (NPY) was investigated. NPY and N.alpha.-Ac-NPY(10-36), and corresponding cyclic analogs cyclo18,22[Lys18,Asp22]-NPY (I; R = Ac, R1 = Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** -NH2) and N.alpha.-Ac-cyclo18,22-[Lys18,Asp22]-NPY(10-36) (I; R = H-Tyr-Pro-Ser-Lys-Pro-Asp-Asn-Pro-Gly-Glu-Asp-Ala-Pro-Ala-Glu-Asp-Leu, R1 = same) were synthesized. Strategies for synthesis of the cyclic analogs included the use of the Kaiser oxime resin and a segment condensation approach. CD studies in phosphate buffer, pH 5.0, indicated self-assocn.

of all four peptides at low millimolar concns. Monomeric N.alpha.-Ac-NPY(10-36) showed only 13% .alpha.-helix, compared to 32% .alpha.-helix for monomeric NPY, demonstrating a helix-stabilizing effect of residues 1-9 that is consistent with the PP fold. The [Lys18,Asp22] lactam bridge stabilized the helical conformation in N.alpha.-Ac-NPY(10-36) (51% .alpha.-helix), but was helix destabilizing in NPY (21% .alpha.-helix). In rat brain receptor binding assays, the cyclic and linear N.alpha.-Ac-NP(10-36) analogs were equipotent (IC50 = 13 nM for 125I-BH-NPY displacement), although the cyclic analog was twice as potent in rat vas deferens assays. NPY was more potent than its cyclic analog in the brain receptor binding assays (IC50 = 0.07 and 0.25 nM, resp.), but these peptides were equipotent in the vas deferens assay. These results support a functional role for the PP fold in NPY and correlate with the soln. conformations of the monomeric peptides.

L12 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1991:656661 CAPLUS
DOCUMENT NUMBER: 115:256661
TITLE: Preparation of human neuropeptide Y analogs as antihypertensives
INVENTOR(S): Boublik, Jaroslav H.; Rivier, Jean E. F.; Brown, Marvin R.; Scott, Neal A.
PATENT ASSIGNEE(S): Salk Institute for Biological Studies, USA; University of California, Oakland
SOURCE: U.S., 8 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5026685	A	19910625	US 1988-219596	19880715
US 5328899	A	19940712	US 1992-882923	19920512

PRIORITY APPLN. INFO.: US 1988-219596 19880715
US 1990-503198 19900330

OTHER SOURCE(S): MARPAT 115:256661
AB Human ***neuropeptide*** ***Y*** analogs XQZ19Z20Z21Z22Z23-Leu-Z25Z26Z27Z28Z29Z30Z31Z32-Arg-Z34-Arg-Z36Y (X = H, .alpha.-Me amino acid residue, N-Me amino acid residue, desamino amino acid residue, C1-7 acyl; Q = Z17Z18, Z18 bond; Z17 = Met, Arg, Nle, Nva, Leu, Ala, D-Ala; Z18 = Ala, Ser, Ile, D-Ala, D-Ser, D-Ile; Z19 = Arg, Lys, Gln; Z20 = Tyr, Phe; Z21 = Tyr, Glu, His, Ala; Z22 = Ser, Ala, Thr, Asn, Asp; Z23 = Ala, Asp, Glu, Gln, Asn, Ser; Z25 = Arg, Gln; Z26 = His, Arg, Gln; Z27 = Phe, Tyr; Z28 = Ile, Leu, Val, Arg; Z29 = Asn, Ile; Z30 = Leu, Met, Thr, Val; Z31 = Ile, Val, Leu; Z32 = Thr, Phe; Z34 = Gln, Pro, His, Z36 = Phe, Tyr; Y = NH2, OH; one of Z27 and Z36 = Phe when Q = Z18) are prepd. as antihypertensives. Thus, H-Leu,Ala-Arg-Tyr-Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** -NH2 (I) is synthesized via solid-phase methods on a p-methylbenzhydrylamine hydrochloride resin using protected amino acids. Cleavage and deprotection is accomplished via treatment of the resin-bound protected peptide by HF. I is said to significantly lower mean arterial pressure after injection into rats.

L12 ANSWER 21 OF 26 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1991:648249 CAPLUS
DOCUMENT NUMBER: 115:248249
TITLE: Systematic point mutation of high affinity analog neuropeptide Y 1-4-Ahx-25-36
AUTHOR(S): Beck-Sickinger, Annette G.; Gaida, Wolfram; Schnorrenberg, Gerd; Jung, Guenther
CORPORATE SOURCE: Inst. Org. Chem., Univ. Tuebingen, Tuebingen, D-7400, Germany
SOURCE: Pept. 1990, Proc. Eur. Pept. Symp., 21st (1991), Meeting Date 1990, 646-8. Editor(s): Giralt, Ernest; Andreu, David. ESCOM Sci. Publ.: Leiden, Neth.
CODEN: 57HNAI
DOCUMENT TYPE: Conference
LANGUAGE: English
AB Structural requirements for biol. activity and receptor recognition of the deletion ***neuropeptide*** ***Y*** (NPY) peptide analog NPY 1-4-Ahx-25-36 (Ahx = 6-aminohexanoic acid) are examd. The C-terminal peptide Arg- ***Gln*** - ***Arg*** - ***Tyr*** -NH2 is essential for NPY receptor binding activity. NPY agonist activity of deletion NPY is much more sensitive to individual amino acid exchange (point mutation).

L12 ANSWER 22 OF 26 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1990:515875 CAPLUS
DOCUMENT NUMBER: 113:115875
TITLE: Neuropeptide Y agonists and partial agonists
INVENTOR(S): Krstenansky, John L.
PATENT ASSIGNEE(S): Merrell Dow Pharmaceuticals, Inc., USA
SOURCE: Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 355793	A2	19900228	EP 1989-115469	19890822
EP 355793	A3	19920422		
EP 355793	B1	19960710		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
ZA 8906376	A	19900530	ZA 1989-6376	19890821
JP 02111794	A2	19900424	JP 1989-214292	19890822
JP 2791955	B2	19980827		
AT 140235	E	19960715	AT 1989-115469	19890822
ES 2091757	T3	19961116	ES 1989-115469	19890822
DK 8904207	A	19900227	DK 1989-4207	19890825
FI 8904006	A	19900227	FI 1989-4006	19890825
NO 8903430	A	19900227	NO 1989-3430	19890825
HU 50849	A2	19900328	HU 1989-4419	19890825
HU 204852	B	19920228		
CN 1042155	A	19900516	CN 1989-106524	19890825
AU 8940828	A1	19900301	AU 1989-40828	19890828
AU 618118	B2	19911212		
US 5395823	A	19950307	US 1993-32526	19930315

PRIORITY APPLN. INFO.:
US 1988-237591 19880826
US 1989-384373 19890724
US 1990-631755 19901221
US 1991-782890 19911018
US 1992-925546 19920805

OTHER SOURCE(S): MARPAT 113:115875
AB Title peptides, e.g. H-Tys-Pro-Ser-Lys-Pro-Asp-Asn-Pro-Gly-Glu-Asp-Ala-Pro-Ala-Glu-X1-Leu-X2-Arg-Tyr-Tyr-X3-Ala-Leu-Arg-His-Tyr-X4-Asn-Leu-X5-Thr-Arg-X6--Arg-Tyr-R (X1 = Glu, Asp; X2, X3 = Ser, Ala; X4, X5 = Leu, Ile, Met, Nle, Val; X!6 = Gln, Pro, His, Ile; R = OR1, NHR1; R1 = H, alkyl) were prepd. for treatment of hypotension, eating aversion disorders, and for treatment of disorders requiring activation of ***neuropeptide*** ***Y*** receptors. Thus, H-Tyr-Pro-Ser-Lys-Pro-Asp-Asn-Pro-Gly-Glu-Asp-Ala-Pro-Ala-Glu-Glu-Leu-Ser-Tyr-Tyr-Ala-Ala-Leu-Arg-His-Tyr-Leu-Asn-Leu-Leu-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** -NH2, prepd. using BOC-protected amino acids on p-methylbenzhydrylamine resin, acted as an agonist of ***neuropeptide*** ***Y*** with an IC50 of <50 nM.

L12 ANSWER 23 OF 26 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1990:139838 CAPLUS
DOCUMENT NUMBER: 112:139838
TITLE: Neuropeptide Y analogs as cardiovascular and antiobesity agents
INVENTOR(S): Jung, Guenther; Beck, Annette; Schnorrenberg, Gerd; Gaida, Wolfram; Lang, Rudolf
PATENT ASSIGNEE(S): Boehringer Ingelheim K.-G., Fed. Rep. Ger.
SOURCE: Ger. Offen., 9 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3811193	A1	19891019	DE 1988-3811193	19880401

PRIORITY APPLN. INFO.: DE 1988-3811193 19880401
OTHER SOURCE(S): MARPAT 112:139838
AB R1-U-X-Y-Z-Ile-Asn-Leu-Ile-Thr-X1-W-X2-Z1-NH2 (R1 = R2CO, di- to pentapeptide deriv.; R2 = C1-7 alkyl, PhCH2; U = bond, aliph. amino acid residue; X, X1, X2 = basic amino acid residue, bond; Y = His, Trp, Phe, Tyr, bond, etc.; Z, Z1 = Tyr, Phe, His, Trp, Cys, naphthylalanyl, substituted Phe, etc.; W = Gln, Asn, Glu, Asp, etc.), ***neuropeptide***

Y agonists or antagonists, useful as cardiovascular and antiobesity agents, were prep[redacted] Thus, H-Tyr-Pro-Ser-Lys-NH(CH[redacted]CO-Arg-His-Tyr-Ile-Asn-Leu-Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** -NH2 was prepd. by the solid-phase method using 9-fluorenylmethoxycarbonyl-protected amino acids on dimethoxyvaleroyloxybenzylamide-contg. resin. The latter at 5 .times. 10-8 M/kg increased blood pressure in rats by 20 mmHg.

L12 ANSWER 24 OF 26 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1989:458358 CAPLUS
DOCUMENT NUMBER: 111:58358
TITLE: Preparation and testing of neuropeptide Y fragments and analogs thereof as calmodulin inhibitors
INVENTOR(S): Ishiguro, Tsuneo; Eguchi, Arahiko; Kato, Nobuaki; Matsuo, Toshiyuki
PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01006294	A2	19890110	JP 1987-241647	19870925
PRIORITY APPLN. INFO.:			JP 1987-27764	19870209

AB ***Neuropeptide*** ***Y*** analogs R1-Xm-A-(His)n-B-Ile-C-Leu-Ile-YkR2 [I; A = Arg, Lys; B = Tyr, Phe, Trp; C = Asn, Gln; m, n, k = 0, 1; X = Leu, Ala-Leu, Ser-Ala-Leu, Tyr-Ser-Ala-Leu, etc.; Y = Thr, Thr-Arg, Thr-Arg-Gln, Thr-Arg-Gln-Arg, Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** , etc.; R1 = H, (un)substituted alkyl, aralkyl, aryl, acyl; R2 = OH, NH2, (un)substituted alkylamino, aralkylamino, arylamino], useful as calmodulin inhibitors, were prepd. Porcine ***neuropeptide*** ***Y*** (12-36), i.e., H-Ala-Pro-Ala-Glu-Asp-Leu-Ala-Arg-Tyr-Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** -NH2 (II), was prepd. by the solid phase method on p-methylbenzhydrylamine resin. II in vitro inhibited the activation of phosphodiesterase by calmodulin with an IC50 of 3.4 .times. 10-8M.

L12 ANSWER 25 OF 26 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1997:262687 BIOSIS
DOCUMENT NUMBER: PREV199799569290
TITLE: Isolation and characterization of neuropeptide Y from the brain of a Chinese snake, Dinodon rufozonatus.
AUTHOR(S): Ohishi, Takahide; Iguchi, Kazuaki; Mochizuki, Tohru; Hoshino, Minoru (1); Ji, Yong-Hua; Futai, Yoko; Yanaihara, Noboru
CORPORATE SOURCE: (1) Sch. Pharmaceutical Sci., Univ. Shizuoka, Shizuoka 422 Japan
SOURCE: Biomedical Research (Tokyo), (1997) Vol. 18, No. 1, pp. 87-93.
ISSN: 0388-6107.
DOCUMENT TYPE: Article
LANGUAGE: English
AB Attempt has been made to isolate ***neuropeptide*** ***Y*** -like immunoreactive component from the crude extracts of the snake brain. The extracts were purified by gel filtration, followed by repeated reverse phase HPLC to give a single component of immunoreactivity. The sequence analysis and mass spectrometric analysis of the purified fraction revealed that this component comprised of 36 amino acid residues with the C-terminal amide. The amino acid sequence, H-Tyr-Pro-Ser-Lys-Pro-Asp-Ser-Pro-Gly-Glu-Asp-Ala-Pro-Ala-Glu-Asp-Met-Ala-Arg-Tyr-Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** -NH-2, was found to be identical to that of chicken NPY and differ in only one residue at position 7 from that of human NPY.

L12 ANSWER 26 OF 26 SCISEARCH COPYRIGHT 2003 THOMSON ISI
ACCESSION NUMBER: 91:265949 SCISEARCH
THE GENUINE ARTICLE: FK184
TITLE: CHARACTERIZATION OF MELANOTROPIN-RELEASE-INHIBITING FACTOR (MELANOSTATIN) FROM FROG BRAIN - HOMOLOGY WITH HUMAN NEUROPEPTIDE-Y
AUTHOR: CHARTREL N; CONLON J M; DANGER J M; FOURNIER A; TONON M C; VAUDRY H (Reprint)
CORPORATE SOURCE: UNIV ROUEN HAUTE NORMANDIE, EUROPEAN INST PEPTIDE RES, MOLEC ENDOCRINOL LAB, CNRS, URA 650, INSERM, F-76134 MT ST

AIGNAN, FRANCE [redacted] UNIV QUEBEC, INST NATL RECH SCI SANTE, POINTE CLAIRE [redacted] 1G6, QUEBEC, CANADA; CREIGHTON UNIV, SCH MED, DEPT BIOMED SCI, CTR REGULATORY PEPTIDE, OMAHA, NE, 68178
COUNTRY OF AUTHOR: FRANCE; CANADA; USA
SOURCE: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1991) Vol. 88, No. 9, pp. 3862-3866.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: ENGLISH
REFERENCE COUNT: 43

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB A polypeptide was purified from frog brain extracts on the basis of its ability to inhibit alpha-melanotropin release from perifused frog neurointermediate lobes. Based on Edman degradation, amino acid analysis, and peptide mapping, the primary structure of this frog melanotropin-release-inhibiting factor (melanostatin) was determined to be H-Tyr-Pro-Ser-Lys-Pro-Asp-Asn-Pro-Gly-Glu-Asp-Ala-Pro-Ala-Glu-Asp-Met-Ala-Lys-Tyr-Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-Ile-Thr-Arg- ***Gln*** - ***Arg*** - ***Tyr*** -NH2. Frog melanostatin belongs to the pancreatic polypeptide/ ***neuropeptide*** ***Y*** /peptide YY family, and the structure of this peptide differs from that of human ***neuropeptide*** ***Y*** by only one amino acid substitution in position 19. A synthetic replicate of frog melanostatin is coeluted with the native peptide on HPLC and is highly potent in inhibiting alpha-melanotropin secretion in vitro (IC50 = 60 nM).

=> s polylysine or (cationized albumin)
L13 16554 POLYLYSINE OR (CATIONIZED ALBUMIN)

=> s l13 (p) tripeptide (p) conjugate
L14 0 L13 (P) TRIPEPTIDE (P) CONJUGATE

=> s balasubramanium a/au
L15 2 BALASUBRAMANIUM A/AU

=> d l15 1-2 ibib abs

L15 ANSWER 1 OF 2 MEDLINE
ACCESSION NUMBER: 84184641 MEDLINE
DOCUMENT NUMBER: 84184641 PubMed ID: 6674212
TITLE: Neurogenic pulmonary edema during hyperpyrexic convulsions.
AUTHOR: Dash H H; Rattan S N; ***Balasubramanium A*** ; Gode G G
SOURCE: INDIAN JOURNAL OF PEDIATRICS, (1983 Sep-Oct) 50 (406) 561-4.
Journal code: 0417442. ISSN: 0019-5456.
PUB. COUNTRY: India
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198406
ENTRY DATE: Entered STN: 19900319
Last Updated on STN: 20000303
Entered Medline: 19840608

L15 ANSWER 2 OF 2 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 87069119 EMBASE
DOCUMENT NUMBER: 1987069119
TITLE: Synthesis of neuropeptide Y.
AUTHOR: ***Balasubramanium A.*** ; Grupp I.; Srivastava L.; et al.
CORPORATE SOURCE: Department of Surgery, University of Cincinnati Medical Center, Cincinnati, OH 45267, United States
SOURCE: International Journal of Peptide and Protein Research, (1987) 29/1 (78-83).
CODEN: IJPPC3
COUNTRY: Denmark
DOCUMENT TYPE: Journal
FILE SEGMENT: 029 Clinical Biochemistry
008 Neurology and Neurosurgery
LANGUAGE: English

=> s chance william/au
L16 2 CHANCE WILLIAM/AU

=> d l16 1-2 ibib abs

L16 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:661046 CAPLUS
DOCUMENT NUMBER: 130:33434
TITLE: NPY upregulates genes containing cyclic AMP response element in human neuroblastoma cell lines bearing Y1 and Y2 receptors: involvement of CREB
AUTHOR(S): Sheriff, Sulaiman; Dayal, Rameshwar; Kasckow, John; Regmi, Ajit; ***Chance, William*** ; Fischer, Josef; Balasubramaniam, Ambikaipakan
CORPORATE SOURCE: College of Medicine, Department of Surgery, University of Cincinnati, Cincinnati, OH, 45267, USA
SOURCE: Regulatory Peptides (1998), 75-76, 309-318
CODEN: REPPDY; ISSN: 0167-0115
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Four NPY receptor subtypes have been cloned, and shown to be coupled to both Ca2+ and cAMP. However, very little is known about the downstream elements mediating NPY actions. It has recently been demonstrated in our lab. that intrahypothalamic (IHT) administration of NPY induces hypothalamic CaM kinase activity, cAMP response element binding protein (CREB) phosphorylation and cAMP response element (CRE) binding activity in rat hypothalamic nuclear proteins. In the present study, we have investigated whether these changes in CRE binding transcriptional factors activated by NPY results in gene regulation using a human neuroblastoma cell line (SK-N-BE2). This cell line which expresses the Y2 subtype of NPY receptors was transfected with a fusion gene contg. 1.305 kb of human CRF 5' flanking region with a perfect palindromic CRE site linked to firefly luciferase gene. NPY treatment increased CaM kinase II activity, CREB phosphorylation and CRE binding in these cells. In transfected cells, luciferase activity was also increased by NPY (1.8-4-fold) within 4 h of treatment. Moreover, forskolin (7-30-fold), which stimulates cAMP prodn., and thapsigargin (6-8-fold), which mobilizes intracellular calcium, also increased luciferase activity within 4 h of treatment. PMA (phorbol-12-myristate-13-acetate), an activator of protein kinase-C, induced luciferase activity by 1.8-fold. NPY augmented forskolin-stimulated luciferase activity from 11- to 15-fold, but had no significant effect on thapsigargin-induced luciferase activity. These findings suggest that activation of protein kinase A (PKA) or CaM kinase leads to the induction of fusion gene. NPY treatment upregulated fusion gene expression through Ca2+ pathway in SK-N-BE2 cell line. Pretreatment with CREB antisense, but not the sense oligodeoxynucleotides, inhibited forskolin-, thapsigargin- and NPY-stimulated luciferase activity. However, CREB sense or antisense oligodeoxynucleotide treatment had no effect on PMA-stimulated luciferase activity. Furthermore, NPY induced CRE binding activity and the expression of CRE contg. Y1 receptor gene in SK-N-MC cell line. These findings suggest that NPY can upregulate CRE contg. reporter gene including Y1 receptor gene and NPY-induced reporter gene regulation in SK-N-BE2 cells is mediated by intracellular Ca2+ and CREB protein.
REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 2 OF 2 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1998:512644 BIOSIS
DOCUMENT NUMBER: PREV199800512644
TITLE: NPY upregulates genes containing cyclic AMP response element in human neuroblastoma cell lines bearing Y1 and Y2 receptors: Involvement of CREB.
AUTHOR(S): Sheriff, Sulaiman (1); Dayal, Rameshwar; Kasckow, John; Regmi, Ajit; ***Chance, William*** ; Fischer, Josef; Balasubramaniam, Ambikaipakan
CORPORATE SOURCE: (1) Dep. Surg., Univ. Cincinnati, Coll. Med., 231 Bethesda Ave., Cincinnati, OH 45267 USA
SOURCE: Regulatory Peptides, (Sept. 25, 1998) Vol. 75-76, No. 0, pp. 309-318.
ISSN: 0167-0115.
DOCUMENT TYPE: Article
LANGUAGE: English
AB Four NPY receptor subtypes have been cloned, and shown to be coupled to both Ca2+ and cAMP. However, very little is known about the downstream elements mediating NPY actions. It has recently been demonstrated in our laboratory that intrahypothalamic (IHT) administration of NPY induces hypothalamic CaM kinase activity, cyclic AMP response element binding

protein (CREB) phosphorylation and cyclic AMP response element (CRE) binding activity in rat hypothalamic nuclear proteins. In the present study, we have investigated whether these changes in CRE binding transcriptional factors activated by NPY results in gene regulation using a human neuroblastoma cell line (SK-N-BE2). This cell line which expresses the Y2 subtype of NPY receptors was transfected with a fusion gene containing 1.305 kb of human CRF 5' flanking region with a perfect palindromic CRE site linked to firefly luciferase gene. NPY treatment increased CaM kinase II activity, CREB phosphorylation and CRE binding in these cells. In transfected cells, luciferase activity was also increased by NPY (1.8-4-fold) within 4 h of treatment. Moreover, forskolin (7-30-fold), which stimulates cAMP production, and thapsigargin (6-8-fold), which mobilizes intracellular calcium, also increased luciferase activity within 4 h of treatment. PMA (phorbol-12-myristate-13-acetate), an activator of protein kinase-C, induced luciferase activity by 1.8-fold. NPY augmented forskolin-stimulated luciferase activity from 11- to 15-fold, but had no significant effect on thapsigargin-induced luciferase activity. These findings suggest that activation of protein kinase A (PKA) or CaM kinase leads to the induction of fusion gene. NPY treatment upregulated fusion gene expression through Ca2+ pathway in SK-N-BE2 cell line. Pretreatment with CREB antisense, but not the sense oligodeoxynucleotides, inhibited forskolin-, thapsigargin- and NPY-stimulated luciferase activity. However, CREB sense or antisense oligodeoxynucleotide treatment had no effect on PMA-stimulated luciferase activity. Furthermore, NPY induced CRE binding activity and the expression of CRE containing Y1 receptor gene in SK-N-MC cell line. These findings suggest that NPY can upregulate CRE containing reporter gene including Y1 receptor gene and NPY induced reporter gene regulation in SK-N-BE2 cells is mediated by intracellular Ca2+ and CREB protein.

=> d his

(FILE 'HOME' ENTERED AT 09:38:08 ON 03 JUL 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 09:38:39 ON 03 JUL 2003

```
L1        46753 S NEUROPEPTIDE Y
L2         3800 S L1 (P) (AGONIST OR ANTIGONIST)
L3            6 S TRIPEPTIDE (P) L2
L4            2 DUPLICATE REMOVE L3 (4 DUPLICATES REMOVED)
L5           18 S L1 (P) TRIPEPTIDE
L6            6 DUPLICATE REMOVE L5 (12 DUPLICATES REMOVED)
L7            4 S L6 NOT L4
L8           33 S TRP-ARG-TYR
L9          117 S GLN-ARG-TYR OR TRP-ARG-TIC OR TCC-ARG-TIC
L10          73 S (L8 OR L9) (P) L1
L11          26 DUPLICATE REMOVE L10 (47 DUPLICATES REMOVED)
L12          26 S L11 NOT (L4 OR L7)
L13       16554 S POLYLYSINE OR (CATIONIZED ALBUMIN)
L14           0 S L13 (P) TRIPEPTIDE (P) CONJUGATE
L15           2 S BALASUBRAMANIUM A/AU
L16           2 S CHANCE WILLIAM/AU
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=> log y

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
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STN INTERNATIONAL LOGOFF AT 09:51:50 ON 03 JUL 2003